# CHAPTER 12



# NAVAL AIRCREWMEN (AW)

NAVPERS 18068-12G CH-62

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#### NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

NAVAL AIRCREWMEN (MECHANICAL) (AWF)



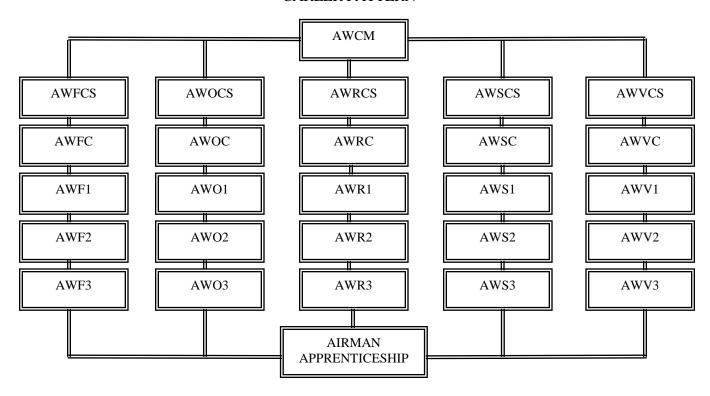
#### SCOPE OF RATING

Naval Aircrewmen Mechanical (AWF) are members of a fixed wing integrated tactical crew aboard C-2, C-12, C-20, C-26, C-37, C-40, C-130, E-6, and P-3 aircraft; perform primary in-flight and ground duties as aircraft Flight Engineer/Crew Chief, Loadmaster/Second Loadmaster, Reel Operator, and Aircrew Readiness Manager; perform aircraft maintenance, Weight and Balance (W&B) calculations, and aircraft systems rigging, Aircrew administration, Flight/Ground training, cargo movement, Medical Evacuations (MEDEVAC), passenger transport, small arms, and Joint Special Warfare operations by using Unmanned Aerial Vehicles (UAV); contribute directly to operations for the purposes of attaining and maintaining the squadron's aircrew qualifications and certifications; and are knowledgeable of all aircraft systems, passenger and cargo handling, safety procedures and equipment, federal and military regulations for passenger transport, emergency procedures, and aircraft equipment.

This Occupational Standard is to be incorporated in Volume I, Part B, of the Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards (NAVPERS 18068F) in Chapter 12.

#### **GENERAL INFORMATION**

**CAREER PATTERN** 



Normal path of advancement to Chief Warrant Officer and Limited Duty Officer categories can be found in OPNAVINST 1420.1.

For rating entry requirements, refer to MILPERSMAN 1306-618.

#### **SAFETY**

The observance of Operational Risk Management (ORM) and proper safety precautions in all areas is an integral part of each billet and the responsibility of every Sailor; therefore, it is a universal requirement for all ratings.

Job Title Job Code 001595

# Air Warfare Systems Engineer

**Short Title (14 Characters)** Job Family **Short Title (30 Characters)** NAC AW SYS ENG Military Specific TBD AIR WARFARE SYSTEMS ENGINEER

Career Field Other Relationships and Rules Pay Plan

**ENLISTED** AWF NECs may include 7836, 8201, 8202, 8206, 8208, 8209, 8210, 8220, 8227, 8235, 8241, 8245, 8250, 8251, 8252, 8278, 8279, and 8289

#### **Job Description**

Air Warfare Systems Engineers are members of fixed wing integrated tactical crews aboard C-2, C-26, C-130, C-40, P-3, E-6 Gulfstream aircraft, or Tactical Operations Center/Mobile Tactical Operations Center (TOC/MTOC); perform primary in-flight and ground duties as aircraft Flight Engineer/Crew Chief, Loadmaster/Second Loadmaster, and Reel Operator; perform maintenance, weight and balance (W&B), and rigging; perform aircrew administration, flight/ground training, internal/external cargo movement, Medical Evacuations (MEDEVAC), and passenger transport; conduct small arms and Naval Special Warfare (NSW) operations by using Unmanned Aerial Vehicles (UAV); perform aircrew duties that contribute directly to aircrew operations, training, and administration for the purposes of attaining and maintaining squadron aircrew qualifications and certifications; and are knowledgeable of all aircraft systems, passenger handling, safety procedures and equipment, federal and military regulations for passenger transport, emergency procedures, and aircraft equipment. Air Warfare Systems Engineers must be able to obtain a final secret security clearance and be able to obtain higher security clearance as required.

DoD Relationship		O*NET Relationship		
Group Title	<u>DoD Code</u>	Occupation Title	SOC Code	Job Family

Air Crew, General 105000 Air Crew Members 55-3011.00 Military Specific

**Skills Abilities** Operation and Control Written Comprehension Critical Thinking Deductive Reasoning Systems Analysis Near Vision Coordination Problem Sensitivity

Quality Control Analysis Originality Judgment and Decision Making Control Precision Complex Problem Solving Manual Dexterity Instructing Multi-limb Coordination Operation Monitoring Written Expression

Equipment Maintenance Wrist-Finger Speed

#### AIRCRAFT SYSTEM OPERATIONS

<b>Paygrade</b>	Task Type	Task Statements
E4	CORE	Adjust aircraft power settings
E4	NON-CORE	Adjust antenna reel length
E4	NON-CORE	Align Inertial Navigation Systems (INS)
E4	CORE	Assign aircraft ditching stations
E4	CORE	Calculate fuel requirements
E4	NON-CORE	Communicate with cargo-loading hand-signals
E4	CORE	Compute aircraft load limitations
E4	CORE	Compute aircraft Weight and Balances (W&B)
E4	CORE	Compute take off, landing, and in-flight performance
E5	CORE	Conduct Functional Check Flight (FCF)
E4	CORE	Configure aircraft for cargo operations
E4	NON-CORE	Initialize Global Positioning Satellite (GPS) equipment
E4	NON-CORE	Jettison cargo

E4	CORE	Maintain aircraft fuel load balance
E4	CORE	Maintain aircraft pressurization
E4	CORE	Maintain environmental control systems
E4	CORE	Monitor aircraft electrical systems
E4	CORE	Operate aircraft engines
E4	CORE	Operate aircraft hydraulic systems
E4	CORE	Operate aircraft pneumatic systems
E4	NON-CORE	Operate anti-icing and de-icing systems
E4	NON-CORE	Operate liquid cooling systems
E4	CORE	Operate propeller systems
E4	CORE	Perform emergency procedures for landing gear systems
E4	NON-CORE	Perform expeditious cargo offload

## AIRCREW ADMINISTRATION

<b>Paygrade</b>	Task Type	<u>Task Statements</u>
E5	CORE	Administer Naval Air Training and Operating Procedures Standardization (NATOPS) programs
E4	CORE	Record individual flight time summaries

#### AIRCREW DUTIES

<b>Paygrade</b>	Task Type	<u>Task Statements</u>
E6	CORE	Analyze monthly reports
E4	CORE	Brief passengers on safety procedures
E4	CORE	Conduct aircraft system testing
E4	CORE	Control Auxiliary Power Units (APU)
E4	CORE	Inspect aircraft and personal survival equipment
E4	NON-CORE	Inspect Search And Rescue (SAR) equipment
E4	CORE	Inspect small arms
E4	CORE	Operate emergency equipment
E4	CORE	Operate radios and Internal Communication Systems (ICS)
E4	CORE	Operate small arms
E4	CORE	Perform aircraft emergency procedures
E4	CORE	Perform aircraft ground handling operations
E4	CORE	Perform Cardio-Pulmonary Resuscitation (CPR) and first aid
E4	NON-CORE	Perform Emergency Destruction Plan (EDP) procedures
E4	NON-CORE	Perform emergency Medical Evacuations (MEDVAC)
E4	CORE	Perform in-flight status system checks
E4	NON-CORE	Perform long cord procedures
E4	CORE	Perform pre and post flight aircraft inspections
E4	CORE	Report visual contacts
E4	CORE	Restrain cargo and equipment
E4	CORE	Supervise aircraft towing and pushback operations

## AIRCREW TRAINING

<b>Paygrade</b>	Task Type	Task Statements
E5	CORE	Administer aircrew training programs
E5	CORE	Conduct Naval Air Training and Operating Procedures Standardization (NATOPS) flight and ground training
E5	NON-CORE	Conduct warfare training exercises
E6	CORE	Develop Naval Air Training and Operating Procedures Standardization NATOPS) training materials
E5	CORE	Develop trainer and simulator scenarios
E5	CORE	Evaluate aircrew qualification and readiness programs
E5	CORE	Facilitate crew resource management programs
E5	CORE	Operate Weapons Systems Trainer (WST) or Operational Flight Trainer (OFT)
E5	CORE	Update aircrew course curriculum
		MAINTENANCE ADMINISTRATION
<u>Paygrade</u>	Task Type	<u>Task Statements</u>
E6	CORE	Brief maintenance operations (maintenance control and work center)
E6	CORE	Conduct Functional Flight Check (FCF) briefs and debriefs
E6	CORE	Conduct maintenance meetings and briefs
E4	CORE	Document aircraft maintenance
E7	CORE	Manage cannibalization actions
E6	CORE	Manage scheduled and unscheduled maintenance
E5	CORE	Manage workload reports
E7	CORE	Manage X-RAY reports
E7	NON-CORE	Monitor aircraft records for government compliance
E4	CORE	Process maintenance actions with Optimized Organizational Maintenance Activity Naval Aviation Logistics Command Managed Information System (OOMA NALCOMIS)
E7	CORE	Release aircraft safe for flight
E4	CORE	Review monthly maintenance plans
E7	CORE	Schedule aircraft for maintenance
E7	CORE	Schedule aircraft for phase/Planned Maintenance Intervals (PMI)
E7	CORE	Schedule aircraft inspections
E6	CORE	Screen Visual Information Display System/Maintenance Action Forms (VIDS/MAF)
E5	CORE	Supervise scheduled and unscheduled maintenance
E7	CORE	Verify aircraft logbooks

Verify Technical Directive (TD) compliance

E6

CORE

#### MAINTENANCE SUPPORT

		WITH TENTINEE BOTT ON
<u>Paygrade</u> E4	<u>Task Type</u> CORE	Task Statements Document aircraft discrepancies
E4	CORE	Evaluate aircraft ground performance
E4	CORE	Inspect aircraft and aircraft components for corrosion
E4	CORE	Inventory tools
E4	CORE	Maintain air conditioning systems
E4	NON-CORE	Maintain air refueling systems
E4	CORE	Maintain aircraft flight databases
E4	CORE	Maintain aircraft hydraulic systems
E4	CORE	Maintain aircraft ice control systems
E4	CORE	Maintain automatic flight control systems
E4	NON-CORE	Maintain extended range fuel tanks
E4	CORE	Maintain flight control systems
E4	CORE	Maintain landing gear assemblies
E4	CORE	Maintain navigation systems
E4	CORE	Maintain pneumatic systems
E4	CORE	Maintain pressurization systems
E5	CORE	Manage Naval Aviation Maintenance Programs (NAMP)
E6	CORE	Monitor Naval Aviation Maintenance Programs (NAMP)
E4	CORE	Operate Support Equipment (SE)
E4	CORE	Perform aircraft conditional inspections
E4	CORE	Perform aircraft daily inspections
E4	CORE	Perform aircraft servicing procedures
E4	CORE	Perform aircraft special inspections
E4	CORE	Perform aircraft turnaround inspections
E5	NON-CORE	Perform certification inspections on aviation combat systems
E4	CORE	Perform corrosion prevention procedures
E4	CORE	Perform preservation and depreservation procedures
E5	CORE	Perform Quality Assurance (QA) inspections
E4	CORE	Perform Support Equipment (SE) inspections (daily, preoperational, etc.)
E6	CORE	Review Maintenance Data Reports (MDR)
E4	CORE	Treat aircraft corrosion
E5	CORE	Update Monthly Maintenance Plans (MMP)
		OPERATIONS AND LOGISTICS
<b>Paygrade</b>	Task Type	Task Statements
E4	NON-CORE	Conduct air logistics training
E4	NON-CORE	Coordinate cargo transfers

Coordinate flight packet requirements

Document logistics flight records

CORE

CORE

E4

E5

E4	CORE	Perform flight and mission planning
E4	NON-CORE	Perform pre and post deployment procedures
E6	NON-CORE	Prepare country clearance messages
E5	CORE	Prepare flight hour reports
E5	CORE	Prepare flight schedules
E5	CORE	Submit airlift requests
E5	NON-CORE	Supervise alert aircraft procedures

# SPECIAL WARFARE AND UNMANNED AERIAL VEHICLE (UAV) OPERATIONS

<b>Paygrade</b>	Task Type	Task Statements
E5	NON-CORE	Conduct Naval Special Warfare (NSW) training
E4	CORE	Conduct Night Vision Device (NVD) operations
E5	NON-CORE	Configure aircraft for Special Warfare Operations (SPECOPS)
E7	NON-CORE	Coordinate Naval Special Warfare (NSW) operations
E5	NON-CORE	Maintain Unmanned Aerial Vehicles (UAV)
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) camera systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) electrical systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) fuel systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) navigation systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) radar systems
E5	NON-CORE	Operate Unmanned Aerial Vehicle (UAV) radio systems
E5	NON-CORE	Perform Naval Special Warfare (NSW) operations
E5	NON-CORE	Perform Unmanned Aerial Vehicle (UAV) pre and post-flight inspections
E5	NON-CORE	Pilot Unmanned Aerial Vehicles (UAV)
E6	NON-CORE	Plan Naval Special Warfare (NSW) operations

# **Job Title Aircrew Readiness Manager (Mechanical)**

Job Code 002539

Job FamilyNOCShort Title (30 Characters)Short Title (14 Characters)Transportation and Material MovingTBDACREW READINESS MGR MECHARM (MECH)

Pay Plan Career Field Other Relationships and Rules

ENLISTED AWF Not Applicable

#### Job Description

Aircrew Readiness Managers (Mechanical) are crucial and integral members of staffs, operational commands, and squadrons; coordinate the operational, administrative, and aircrew scheduling functions; administer and manage training programs and resources for naval aircrew, manage standardization of aircrew training programs to enhance proficiency and readiness, and coordinate all aspects of aircrew training; administer and direct the Naval Air Training and Operating Procedures Standardization (NATOPS) and Search and Rescue (SAR) programs; administer and direct tactics, training and readiness, ordnance and weapons, and aircrew training. As program managers they analyze training resource requirements, review and approve contract options for new training devices and programs, develop and revise curriculum, incorporate and initiate new aircrew training programs, manage student quotas, qualifications and certifications, and coordinate aircrew physical fitness and health program initiatives.

#### DoD Relationship O\*NET Relationship

<u>Group Title</u>	<u>DoD Code</u>	Occupation Title	<u>SOC Code</u>	<u>Job Family</u>
Air Crew, General	105000	Airfield Operations	53-2022.00	Transportation and Material
		Specialists		Moving

Skills Abilities

Critical Thinking Deductive Reasoning
Instructing Written Comprehension

Complex Problem Solving Originality

CoordinationProblem SensitivityJudgment and Decision MakingControl PrecisionMonitoringWrist-Finger SpeedWritingInductive ReasoningManagement of Material ResourcesMathematical ReasoningQuality Control AnalysisOral ComprehensionLearning StrategiesOral Expression

#### AIRCREW ADMINISTRATION

Paygrade E5	Task Type CORE	Task Statements Administer Naval Air Training and Operating Procedures Standardization NATOPS) programs
E7	CORE	Conduct flight order audit boards
E6	CORE	Coordinate Planning Board For Training (PBFT) meetings
E4	CORE	Record individual flight time summaries
E7	CORE	Verify training and readiness matrices

#### AIRCREW DUTIES

<b>Paygrade</b>	Task Type	Task Statements
E6	CORE	Analyze monthly reports
E7	CORE	Define aircrew production requirements
E4	CORE	Perform Cardio-Pulmonary Resuscitation (CPR) and first aid

#### AIRCREW TRAINING

<b>Paygrade</b>	Task Type	Task Statements
E5	CORE	Administer aircrew training programs
E7	NON-CORE	Brief fleet aviation training requirements to upper echelon
E5	CORE	Conduct Naval Air Training and Operating Procedures Standardization (NATOPS) flight and ground training
E6	CORE	Develop Naval Air Training and Operating Procedures Standardization (NATOPS) training materials
E5	CORE	Develop trainer and simulator scenarios
E5	CORE	Evaluate aircrew qualification and readiness programs
E5	CORE	Facilitate crew resource management programs
E5	CORE	Update aircrew course curriculum

# OPERATIONS AND LOGISTICS

<b>Paygrade</b>	Task Type	Task Statements
E7	NON-CORE	Brief fleet acquisition programs
E4	NON-CORE	Conduct air logistics training
E7	CORE	Coordinate aircraft availability for long and short range planning
E6	NON-CORE	Coordinate Operating Areas (OPAREA) schedules with external agencies
E7	NON-CORE	Coordinate tactical exercises
E7	NON-CORE	Coordinate training systems acquisition contracts
E6	NON-CORE	Determine aircrew readiness requirements for individuals and crews
E6	CORE	Develop aircrew mission briefs
E5	CORE	Document logistics flight records
E7	NON-CORE	Manage Operational Target (OPTAR) budgets
E4	CORE	Perform flight and mission planning
E6	NON-CORE	Prepare country clearance messages
E5	CORE	Prepare flight hour reports
E5	CORE	Prepare flight schedules
E7	CORE	Process temporary flight order requests
E5	CORE	Report aircraft mission capability status
E5	CORE	Submit airlift requests
E7	CORE	Submit logistics requests
E5	NON-CORE	Supervise alert aircraft procedures

## SPECIAL WARFARE AND UNMANNED AERIAL VEHICLE (UAV) OPERATIONS

<b>Paygrade</b>	<u>Task Type</u>	<u>Task Statements</u>
E6	NON-CORE	Plan Night Vision Device (NVD) operations